Amendments to the Claims

This listing of claims will replace all prior versions, or listings, or claims in the application.

Listing of Claims:

1. (Currently amended) A method of processing filamentary nanocarbon, comprising the steps of:

providing a quantity of entangled filamentary nanocarbon;

providing a supply of high pressure, near-supercritical CO_2 ~~CO2~~;

providing a pressure vessel;

installing said quantity of entangled filamentary nanocarbon into said pressure vessel;

introducing said near-supercritical CO_2 ~~CO2~~ into said pressure vessel and onto said quantity of entangled filamentary nanocarbon such that said quantity of entangled filamentary nanocarbon becomes a quantity of disentangled filamentary nanocarbon; and,

collecting said quantity of disentangled filamentary nanocarbon ~~while releasing said near-supercritical CO2~~ from said pressure vessel.

2. (Currently amended) The method of claim 1 wherein said collecting step is preceded by the step of agitating ~~the mixture of~~ said near-supercritical CO_2 ~~CO2~~ and said quantity of entangled filamentary nanocarbon.

3. (Original) The method of claim 1 wherein said installing step is preceded by the step of adding a quantity of surfactant into said pressure vessel.

4. (Original) The method of claim 1 wherein said installing step is preceded by the step of adding a quantity of acid into said pressure vessel.

5. (Currently amended) The method of claim 1 wherein said near-supercritical CO_2 ~~CO2~~ includes an acid sufficient for metal catalyst removal.

6. (Original) The method of claim 1 wherein said installing step is preceded by the step of adding a quantity of co-solvent into said pressure vessel.

7. (Currently amended) The method of claim 1 wherein said installing step is preceded by the step of adding a quantity of polymer to be pre-impregnated into ~~the~~ said quantity of entangled filamentary nanocarbon into said pressure vessel.

8-9. (Canceled)

10. (Currently amended) A method of processing filamentary nanocarbon, comprising the steps of:

providing a quantity of entangled filamentary nanocarbon;

providing a supply of high pressure, near-supercritical CO_2 ~~CO2~~;

providing a pressure vessel;

installing said quantity of entangled filamentary nanocarbon into said pressure vessel;

introducing said near-supercritical CO_2 ~~CO2~~ into said pressure vessel and onto said quantity of entangled filamentary nanocarbon such that said quantity of entangled filamentary nanocarbon becomes a quantity of disentangled filamentary nanocarbon; and,

releasing said near-supercritical CO_2 ~~CO2~~ and said quantity of disentangled filamentary nanocarbon from said pressure vessel by spraying through a nozzle.

11. (Currently amended) The method of claim 10 wherein said releasing step is preceded by the step of agitating ~~the mixture of~~ said near-supercritical CO_2 and said quantity of entangled filamentary nanocarbon.

12. (Original) The method of claim 10 wherein said installing step is preceded by the step of adding a quantity of surfactant into said pressure vessel.

13. (Original) The method of claim 10 wherein said installing step is preceded by the step of adding a quantity of acid into said pressure vessel.

14. (Currently amended) The method of claim 10 wherein said near-supercritical $\underline{CO_2}$ ~~CO2~~ includes an acid sufficient for metal catalyst removal.

15. (Original) The method of claim 10 wherein said installing step is preceded by the step of adding a quantity of co-solvent into said pressure vessel.

16. (Currently amended) The method of claim 10 wherein said installing step is preceded by the step of adding a quantity of polymer to be pre-impregnated into ~~the~~ said quantity of entangled filamentary nanocarbon into said pressure vessel.

17-18. (Canceled)